

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Santa Clara Wastewater Treatment Plant Emergency Response - Removal Polrep
 Final Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region IX**

Subject: **POLREP #7**
Final
Santa Clara Wastewater Treatment Plant Emergency Response

Santa Paula, CA
Latitude: 34.3144538 Longitude: -119.1024780

To: Harry Allen, EPA Region 9
 Kathleen Salyer, EPA Region 9
 Enrique Manzanilla, EPA Region 9

From: Martin Powell, OSC

Date: 1/21/2015

Reporting Period: 01/03/2015 - 01/09/2015

1. Introduction

1.1 Background

Site Number:	A973	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/18/2014	Start Date:	11/18/2014
Demob Date:	1/9/2015	Completion Date:	1/9/2015
CERCLIS ID:	CAN000900238	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The incident began at approximately 3:30 am on November 18, when a vacuum truck exploded. Reports vary as to what activities lead up to the explosion (one suggested that the operator had begun aggregating wastes from totes at the facility into the vac truck). A fire ensued, eventually involving several waste streams, including oxidizers, acids, polymerizing agents, and possibly chlorine tablets. It is not clear what was in the vac truck when the explosion began. The secondary containment filled with a watery sludge from the mixed chemicals.

Almost immediately, fine crystals formed on the drying surfaces from the chemical mix; these were found to be shock sensitive, and the VCFD experienced a couple of incidents of sparks and small explosions from walking on the crystals. VCFD Haz Mat indicated that all tests on the crystals indicated an organic peroxide. VCFD and Santa Paula fire each abandoned one firefighting rig in the facility due to contamination with shock-sensitive organic peroxide. The Ventura County Sheriff conducted an evacuation out to a distance of one half mile and a shelter in place advisory was issued to residents located up to three miles downwind.

1.1.2.1 Location

815 Mission Rock Road, Santa Paula, CA 93060

1.1.2.2 Description of Threat

The fire has been extinguished, although a significant smoke plume/gas cloud was observed to leave the site.

The following inventory summarizes chemicals reported to be on the site prior to the fire. It is believed that other unknown chemicals were also present.

Common Name	Maximum Amount Onsite
motor oil	110 gallons
oxygen	1,000 cubic feet
acetylene	600 cubic feet
potassium permanganate	1,500 pounds
diesel fuel	500 gallons
320-L polymer	1,980 gallons
460-TC polymer	660 gallons
chlorine tablets	2,750 tablets
hydrogen peroxide	3,300 gallons
soda ash	3,300 gallons
sodium hypochlorite	990 gallons
aluminum chloride	1,650 gallons
anionic polymer	2,750 gallons
defoamer	110 gallons
emulsion breaker	110 gallons
ferric sulfate	3,300 gallons
sulfuric acid 93-99%	660 gallons
used motor oil	110 gallons.
used motor oil filters	100 gallons

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Due to the nature of the hazards onsite, the site assessment process is running in parallel with cleanup/neutralization operations. While the specific chemicals of concern are unknown, the driving hazardous are pH and oxidizers. The oxidizers are shock sensitive, erupt in a flash of fire, and are pervasive onsite. Therefore neutralization efforts are employed prior to assessment, with assessment serving as confirmation of successful neutralization. This process continues as areas of the site are cleared, thus allowing access to the uncontained mixture of chemicals located in the center of the site. Traditional offsite laboratory analysis is currently unavailable due to the hazard that samples pose to the lab equipment and personnel. The stabilization alternative chosen for the ponded chemical mixture on site involves mixing with powdered stone and fine gravel.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

01-03-2015 Day 51 (1-OSC, 1-START)

Patriot continued the removal of solidified waste trucks starting at 0600. A total of 80 loads of solidified waste were transported to Chiquita Canyon Landfill.

Patriot conducted polymer removal by hand and with power washers in Sector C3. The chemistry shed in Sector D2 was removed with excavators and crushed up into the solidified waste pile.

CTEH collected a sample of the unidentified tote in Sector C3 (bringing the total tote count up to 64). HAZCAT results revealed the pH to be 4 with no additional characteristics of note.

01-04-2015 Day 52 (1 START)

The Chiquita Canyon Landfill is closed on Sundays, so no loads could be transported off site today.

Patriot/CTEH completed solidification of polymers in sections C1 and C2, and scraped up loose soil/solidified materials on the concrete in sections D1 and D2. These areas will be pressure washed in the next operational period and swipe tested.

CTEH took grab samples out of the two 120-bbl tankers in E3, then Patriot transferred the contents of one of the tankers to a frac tank in Section F4. Patriot will transfer the contents of the other 120-bbl tanker to the same frac tank in the next operational period. Haz cat analyses are pending on the samples collected.

The START discussed several issues with Scott Boston (Haley and Aldrich):

- 1) The perimeter fence – the facility will repair and/or replace sections of the perimeter fence to entirely contain all containers on the site. The perimeter fence will utilize many of the existing fence structures, and exclude sectors E1, F1, F2, and F3 from the perimeter. The assessment of the fence will be completed in the next operational period, and work to commence later in the week.
- 2) Chemical Storage – the facility would like to move the totes to new storage areas. The totes will need to be labelled according to their hazard class and moved to segregated storage areas. CTEH will provide a map of the proposed storage areas to the IC for approval before any totes are moved. The totes and other chemical containers will be labelled in the next operational period.
- 3) The pooled water outside the current operational area – The facility wants to know whether EPA considers the water outside of the current operational area as part of the removal. The facility states that this water is accumulated rainwater that has not been affected by the chemical explosion, fire, or release. The START suggested that they haz cat the water and have the data available for review when OSC Powell returns. In addition, since this water cannot be release to the POTW or stormwater system, they should figure out how they want to get rid of it, and sample accordingly. They will need to determine whether the oily water in the wood chip area is a State hazardous waste.

Operations planned for tomorrow:

- 1) Empty the contents of frac tank SKI383 in A2, in preparation for lifting and cleaning.
- 2) Remove solids out of the remaining 120-bbl truck in E3, depositing in frac tank in F4.
- 3) Neutralize the interior of the Source Truck (120-bbl black truck, E2), and the truck in E4 using Na-sulfite.
- 4) Pressure wash the concrete in areas C1, C2, D1, and D2.
- 5) Rinse the 70- and 120-bbl Patriot trucks in F2 and demobilize.
- 6) Continue transporting bins of solidified waste to the Chaquita Landfill.
- 7) Complete soft material removal on Engine 26 so the insurance adjustor can inspect. Pull the engine onto a low-boy and possibly remove it from the site.
- 8) Collect five samples of accumulated water in A and B Sectors for haz cat and analysis.

- 9) Label totes and chemical containers at the site in preparation for moving to segregated storage.

01-05-2015 Day 53 (1-START)

Patriot/CTEH sprayed neutralization solution on the interior and exterior of the source vac truck (black 120-bbl; E2), as well as the surface of the small truck in B4. Confirmation swipe tests indicated no reactive materials on these surfaces. Patriot/CTEH also pressure washed C1, C2, D1, and D2, as well as further consolidated the remaining pile of solidified waste.

Patriot transported three roll-off bins containing approximately 44 cubic yards of solidified material to the Chiquita Canyon Landfill. There are five more bins with soil on the yard. There is also a stockpile of soil awaiting characterization data before it can be removed. CTEH solidified a few hundred gallons of water that accumulated in the containment area overnight; CTEH identified a leaking valve that may be the source of that additional water.

Patriot/CTEH submitted a workplan for the decontamination and confined space entry into frac tank SKI 383. The START and VCEH reviewed the plan and found it sufficient for the task. Once Patriot/CTEH began pumping the tank, they decided to apply pressurized water to remove the tank solids from an outside position, negating the need for a confined space entry.

Patriot rinsed two vac trucks (a 70 and a 120 bbl) in F1 and F3 in preparation for demobilization. Patriot also emptied the remaining 120-bbl truck in E3 and demobilized it from the site. The contents of the two 120-bbl tankers that were in E3, as well as the rinsate from the other Patriot trucks, are now in frac tank SKI 722, located in F4.

CTEH completed labeling the totes on site and provided a map of where the totes will be located. The design will be a berm structure constructed of sandbags and plastic, separating each hazard class. The totes will be moved tomorrow.

CTEH also collected five water samples from pools around the site. A sample collected from A2 had a pH of 10. Otherwise, there were no hazards identified in the liquids.

01-06-2015 Day 54 (1-OSC, 1-START)

Patriot/CTEH lifted frac tank SKI383 in A2, removed the standing water from underneath, and performed a swipe sample of the hard surface. The results indicate no oxidizers and neutral pH.

Patriot pressure washed the central part of the facility (Sectors C and D) as soil was removed. Patriot dumped the contents of four roll-off bins into the stockpile in order to demobilize the roll-offs from the site. Waste will be transported to the dump using end dumps rather than roll-offs due to truck availability, capacity, and quicker turnaround time.

Patriot/CTEH removed water from the wood chip area and built a chip berm for opening the "guzzler" to collect a hazcat sample. This berm will be replaced with soil tomorrow.

Patriot/CTEH placed plastic down at the tote staging area and began moving totes into the area, segregated by hazard class. One round flammables tank was left in place because it could not be lifted out of its cradle; it will be inventoried in place.

CTEH collected eight samples of rainwater from frac tanks and will hazcat them tomorrow.

01-07-2015 Day 55 (1-OSC, 1-START)

Patriot and CTEH prepped the chip berm area for the opening and sampling of the "guzzler". A Patriot/CTEH sample team donned ThermoPro suits and opened the rear access hatch of the "guzzler" to release a small amount of liquid into the chip berm. CTEH conducted oxidizer and pH tests on the

liquid and found it to be neutral pH and negative for oxidizers. The remainder of the “guzzler” material was released into the chip berm and the “guzzler” was pressure washed clean.

Patriot/CTEH continued staging totes in the bermed area of Sector E4.

Consolidation of material continued in sector D2, stockpiling in preparation for removal of material tomorrow.

Pressure washing continued in Sectors B2, C1, C2, C3, D1, D2, D3, and D5. Any remaining material is shoveled out into the stockpile, the area is pressure washed, and a confirmation swipe is taken with pH and oxidizer paper. The trench in area D2 is being shoveled out and checked for any cracks or surface weaknesses.

A plan has been proposed by CTEH to conduct soil sampling at 5 biased locations at the Site. Samples will be collected from E2, C3, F1, and two from B4. Per requests from the county, the soil samples will be analyzed for VOCs, SVOCs, TPH, Metals, Anions, Chlorine, and pH. Each sample will also be field screened for oxidizers.

01-08-2015 Day 56 (1-OSC, 1-START)

The loading, transportation, and disposal of solidified waste continued at 0600. Nine trucks were utilized today and a total of 45 loads of solidified waste were transported to Chiquita Canyon Landfill. The remainder of the material is expected to be removed from site by mid-day tomorrow.

Five soil samples were collected from the site by CTEH. Samples were collected from F1, C3, E2, and two samples were collected from B4. The samples were field screened for oxidizers and found to be negative. All samples were shipped under chain of custody to Test America in Irvine. The samples will be analyzed for VOCs, SVOCs, TPH, Metals, Anions, Chlorine, and pH.

Patriot/CTEH completed the staging of all remaining totes and small containers in the bermed staging area. All materials are segregated by category and on top of plastic.

Pressure washing continued in Area D2, with the cleaning of the trench. The trench was found to be approximately 1.5 feet deep and did not have any open pipe ends or significant cracks inside. The trench was swiped for oxidizers and pH and cleared.

Ventura County Fire Department arrived on site and took possession of Engine 26. The Engine was charged, rinsed one additional time, and then towed off site.

A fencing contractor arrived on site to repair areas of the fence which were insufficient and provide adequate fencing around the remainder of the perimeter. Gates were added to the NW access to the site as well as the SE access.

SCWW, Haley and Aldrich, US EPA, VCEH, CTEH, and Patriot will meet to conduct a final walkthrough of the property tomorrow prior to the end of the day.

01-09-2015 Day 57 (1-OSC, 1-START)

Patriot continued loading, transporting, and disposing of saturated waste at 0600. A total of 11 trucks were utilized today. In total, 37 loads of material were transported to Chiquita Canyon Landfill for disposal. All solidified waste was off site by 13:30.

Patriot completed the pressure washing of D5, D4, and E2 following the removal of staged wastes. All areas were screened for oxidizer and pH and cleared.

Patriot removed all used PPE from the Site. All roll-off bins of sand bags were also demobilized from the Site.

Representatives from SCWW, Haley and Aldrich, Patriot, CTEH, and VCEH completed a walkthrough of the property at 1530. All open access to the property have been fenced in and new locks have been put

on. The inventoried totes on site have been staged in the bermed area of Sector E4. All solidified waste has been transported off site for disposal at Chiquita Canyon Landfill.

START, US EPA, VCEH, and Incident Command demobilize from the Site.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

OSC Powell has provided verbal notice to the PRP's legal counsel on 11/24/2014, and to the PRP on 11/25/2014. A NFRA was issued to the Plant's Operation Manager on 11/26/2014. On 11/28/2014 the Plant's Operation Manager stated that the NFRA had been provided to the PRP. A signature memorializing receipt of NFRA was received on 12/07/2014.

2.2 Planning Section

2.2.1 Anticipated Activities

Conduct all work in a safe manner
Continue to evaluate contamination of the facility
Continue to evaluate any offsite impacts
Continue to decontaminate trucks and apparatus that inhibit safe access to work areas
Continue cleanup of facility, and initiate treatment/disposal of waste material
Continue to keep the community and response partners informed of site activities
Prepare for rain events

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

The response actions outlined in the 11/26/2014 Notice of Federal Response Action (NFRA) have been addressed by the Santa Clara Waste Water Treatment (PRP). This emergency response was completed 01/09/2015. No further actions are anticipated by EPA's Emergency Response Section.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

2.5.2 Liaison Officer

2.5.3 Information Officer

Public affairs are being handled by Ventura County OES and FD.

EPA does not have a PIO onsite. Nahal Mogharabi is serving as the EPA PIO from a remote location and will provide onsite support if requested.

3. Participating Entities

3.1 Unified Command

Santa Clara Wastewater Treatment, EPA and Ventura County Environmental Health

3.2 Cooperating Agencies

Ventura County Fire
Ventura County Sheriff
Santa Paula Fire
Ventura County Agricultural Commission
U.S. Food and Drug Administration
CA Department of Public Health, Food and Drug Branch
CA OSHA

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.